

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/019,817D  
Source: IFW/6  
Date Processed by STIC: 11-18-09

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 11/18/2004

PATENT APPLICATION: US/10/019,817D

TIME: 16:29:50

Input Set : N:\FATIMA\10019817.txt

Output Set: N:\CRF4\11182004\J019817D.raw

3 <110> APPLICANT: Societe des Produits Nestle S.A.

5 <120> TITLE OF INVENTION: The Lactose operon of Lactobacillus delbrueckii and its use

for

6 controlling gene transcription and/or expression in bacterial

7 cells

9 <130> FILE REFERENCE: 112843-039

C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/019,817D

12 <141> CURRENT FILING DATE: 2002-05-13

14 <150> PRIOR APPLICATION NUMBER: PCT/EP00/05834

15 <151> PRIOR FILING DATE: 2000-06-23

17 <150> PRIOR APPLICATION NUMBER: 99112471.0

18 <151> PRIOR FILING DATE: 1999-06-30

20 <160> NUMBER OF SEQ ID NOS: 33

22 <170> SOFTWARE: PatentIn version 3.2

24 <210> SEQ ID NO: 1

25 <211> LENGTH: 1435

26 <212> TYPE: DNA

27 <213> ORGANISM: Lactobacillus delbrueckii

29 <400> SEQUENCE: 1

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31	actgaataat	gctacaattg	acttaacagc	ataaaatttt	agtaaaagcg	agtgaagaag	120
32	atggcaacga	tcagagaagt	ggccaaggca	gccggcggtg	cgccagcgac	ggtttcccg	180
33	gtcttgaact	atgaccagac	cctgtcggtc	aatgaggcaa	cgccgagcaa	gatattcaaa	240
34	actgtgaag	ccatgcacta	ccataagagc	cggaagacca	gaaagagcaa	gcaaaagcg	300
35	ctggcgatct	gcctgtggtg	tgaccaagac	caggagatca	aggacctcta	ttactattca	360
36	atcagaacca	gcgcgcaagc	agaggccaag	aagcagggac	ttgaaagcca	ggtcatttat	420
37	ccggctgatc	ctttgcccga	tccagctgct	ttaagcggga	ttatcatgat	tggctaccag	480
38	cagtattcgc	cagaccgctt	gaatgaagtc	aaaaagtcg	gcctgcccct	ggtctttgtc	540
39	gatactgaca	ccttaaaatt	gggttactgc	tcagttgtgg	ctgactttgg	ccaggccatg	600
40	caggaggcgc	tagagggtctt	ctggggggcag	ggcagggagc	ggatcgccct	tttggatggt	660
41	gattttggaca	gtaattttga	taaaaacaac	ttggctcgact	tccgcttcog	cgattataag	720
42	aagagcctcg	cggcccgcgg	ccagtaacgac	ccggacttag	tctatgttgg	aaacttcaact	780
43	ccgcaatctg	gctatgaagc	cattaaagaa	gctcttaagt	ccggctcctt	cccgaagcc	840
44	ttgattgcgg	ctaataagc	catggtctatt	ggagcattga	aggcctttta	agaagctgga	900
45	attaaagtcc	cagaggacgt	cagtctgatt	tcttttaatt	acacaacggc	agcagaattt	960
46	gccaacccag	ccttgactag	cgtacatgta	gagacccagc	agatgggccc	agccagcgct	1020
47	aaggctcatga	aagacctgct	ggatgatgat	gaagccggca	cttacaaggt	cactttccca	1080
48	acaaaactcg	tttaccggga	atcttgccca	aaagcataag	ggcatagagc	ataataacag	1140
49	caaagaaata	gcttggagat	tgattttctc	caagctattt	ttcgtatata	ttatggctgc	1200
50	attctgttga	tcattcttgg	gaatgggaca	gcttcacgaa	cgtggtccag	cttgcatatc	1260
51	caggcaatga	cccgttcaaa	gcccattccc	aagccggagt	gcggcacgtg	ccgtactttt	1320
52	ctcagggtcc	caggtaccca	ggagtagtcg	tcccagggtt	gaggcccgtc	tcttcgattt	1380
53	gogccttcaa	ggtgtcgtag	tcagcttcac	gttctgatcc	gccatgattt	cccgt	1435
59	<210>	SEQ ID NO: 2					

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60 <211> LENGTH: 332
61 <212> TYPE: PRT
62 <213> ORGANISM: Lactobacillus delbrueckii
64 <400> SEQUENCE: 2
66 Met Ala Thr Ile Arg Glu Val Ala Lys Ala Ala Gly Val Ser Pro Ala
67 1 5 10 15
70 Thr Val Ser Arg Val Leu Asn Tyr Asp Gln Thr Leu Ser Val Asn Glu
71 20 25 30
74 Ala Thr Arg Gln Lys Ile Phe Lys Thr Ala Glu Ala Met His Tyr His
75 35 40 45
78 Lys Ser Arg Lys Thr Arg Lys Ser Lys Gln Lys Arg Leu Ala Ile Cys
79 50 55 60
82 Leu Trp Cys Asp Gln Asp Gln Glu Ile Lys Asp Leu Tyr Tyr Tyr Ser
83 65 70 75 80
86 Ile Arg Thr Ser Ala Gln Ala Glu Ala Lys Lys Gln Gly Leu Glu Ser
87 85 90 95
90 Gln Val Ile Tyr Pro Ala Asp Pro Leu Pro Asp Pro Ala Ala Leu Ser
91 100 105 110
94 Gly Ile Ile Met Ile Gly Tyr Gln Gln Tyr Ser Pro Asp Arg Leu Asn
95 115 120 125
98 Glu Val Lys Lys Ser Gly Leu Pro Leu Val Phe Val Asp Thr Asp Thr
99 130 135 140
102 Leu Lys Leu Gly Tyr Cys Ser Val Val Ala Asp Phe Gly Gln Ala Met
103 145 150 155 160
106 Gln Glu Ala Leu Glu Val Phe Trp Gly Gln Gly Arg Glu Arg Ile Ala
107 165 170 175
110 Leu Leu Asp Gly Asp Leu Asp Ser Asn Phe Asp Lys Asn Asn Leu Val
111 180 185 190
114 Asp Phe Arg Phe Arg Asp Tyr Lys Lys Ser Leu Ala Ala Arg Gly Gln
115 195 200 205
118 Tyr Asp Pro Asp Leu Val Tyr Val Gly Asn Phe Thr Pro Gln Ser Gly
119 210 215 220
122 Tyr Glu Ala Ile Lys Glu Ala Leu Lys Ser Gly Ser Phe Pro Lys Ala
123 225 230 235 240
126 Leu Ile Ala Ala Asn Asp Ala Met Ala Ile Gly Ala Leu Lys Ala Phe
127 245 250 255
130 Lys Glu Ala Gly Ile Lys Val Pro Glu Asp Val Ser Leu Ile Ser Phe
131 260 265 270
134 Asn Asp Thr Thr Ala Ala Glu Phe Ala Asn Pro Ala Leu Thr Ser Val
135 275 280 285
138 His Val Glu Thr Gln Gln Met Gly Arg Ala Ser Val Lys Val Met Lys
139 290 295 300
142 Asp Leu Leu Asp Asp Asp Glu Ala Gly Thr Tyr Lys Val Thr Phe Pro
143 305 310 315 320
146 Thr Lys Leu Val Tyr Arg Glu Ser Cys Pro Lys Ala
147 325 330
150 <210> SEQ ID NO: 3
151 <211> LENGTH: 6
152 <212> TYPE: DNA

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Input Set : N:\FATIMA\10019817.txt

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153 <213> ORGANISM: Lactobacillus delbrueckii	
155 <400> SEQUENCE: 3	
156 tgttta	6
159 <210> SEQ ID NO: 4	
160 <211> LENGTH: 7	
161 <212> TYPE: DNA	
162 <213> ORGANISM: Lactobacillus delbrueckii	
164 <400> SEQUENCE: 4	
165 gtaaaca	7
168 <210> SEQ ID NO: 5	
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170 <212> TYPE: DNA	
171 <213> ORGANISM: Lactobacillus delbrueckii	
173 <400> SEQUENCE: 5	
174 gtaaacg	7
179 <210> SEQ ID NO: 6	
180 <211> LENGTH: 17	
181 <212> TYPE: DNA	
182 <213> ORGANISM: Lactobacillus delbrueckii	
184 <400> SEQUENCE: 6	
185 cgcctggtga ttcagcc	17
188 <210> SEQ ID NO: 7	
189 <211> LENGTH: 20	
190 <212> TYPE: DNA	
191 <213> ORGANISM: Lactobacillus delbrueckii	
193 <400> SEQUENCE: 7	
194 agctttacgg ggaagtcggg	20
197 <210> SEQ ID NO: 8	
198 <211> LENGTH: 15	
199 <212> TYPE: DNA	
200 <213> ORGANISM: Lactobacillus delbrueckii	
202 <400> SEQUENCE: 8	
203 tgtaagcgta aacaa	15
206 <210> SEQ ID NO: 9	
207 <211> LENGTH: 98	
208 <212> TYPE: DNA	
209 <213> ORGANISM: Lactobacillus delbrueckii	
211 <400> SEQUENCE: 9	
212 tgtttactaa aaatatatttg gtaaagcatc ttgatttggt tagtaaaccg gtctatactg	60
213 taagcgtaaa caagttagaa cacctaaagg agaaaaac	98
216 <210> SEQ ID NO: 10	
217 <211> LENGTH: 25	
218 <212> TYPE: DNA	
219 <213> ORGANISM: Lactobacillus delbrueckii	
221 <400> SEQUENCE: 10	
222 atattactgc agagtaaaag cgagt	25
225 <210> SEQ ID NO: 11	
226 <211> LENGTH: 25	
227 <212> TYPE: DNA	

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Input Set : N:\FATIMA\10019817.txt

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228 <213> ORGANISM: Lactobacillus delbrueckii
230 <400> SEQUENCE: 11
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234 <210> SEQ ID NO: 12
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237 <213> ORGANISM: Lactobacillus delbrueckii
239 <400> SEQUENCE: 12
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243 <210> SEQ ID NO: 13
244 <211> LENGTH: 27
245 <212> TYPE: DNA
246 <213> ORGANISM: Lactobacillus delbrueckii
248 <400> SEQUENCE: 13
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253 <211> LENGTH: 27
254 <212> TYPE: DNA
255 <213> ORGANISM: Lactobacillus delbrueckii
257 <400> SEQUENCE: 14
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261 <210> SEQ ID NO: 15
262 <211> LENGTH: 18
263 <212> TYPE: DNA
264 <213> ORGANISM: Lactobacillus delbrueckii
266 <400> SEQUENCE: 15
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271 <211> LENGTH: 25
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273 <213> ORGANISM: Lactobacillus delbrueckii
275 <400> SEQUENCE: 16
276 ataaatctgc agtgggtatg gtggc                                25
279 <210> SEQ ID NO: 17
280 <211> LENGTH: 22
281 <212> TYPE: DNA
282 <213> ORGANISM: Lactobacillus delbrueckii
284 <400> SEQUENCE: 17
285 gatcgttgcc acattcacca cc                                22
288 <210> SEQ ID NO: 18
289 <211> LENGTH: 21
290 <212> TYPE: DNA
291 <213> ORGANISM: Lactobacillus delbrueckii
293 <400> SEQUENCE: 18
294 ggtgaatgtg gcaacgatca g                                21
299 <210> SEQ ID NO: 19
300 <211> LENGTH: 25
301 <212> TYPE: DNA
302 <213> ORGANISM: Lactobacillus delbrueckii

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## RAW SEQUENCE LISTING

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TIME: 16:29:50

Input Set : N:\FATIMA\10019817.txt

Output Set: N:\CRF4\11182004\J019817D.raw

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304 <400> SEQUENCE: 19
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308 <210> SEQ ID NO: 20
309 <211> LENGTH: 25
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311 <213> ORGANISM: Lactobacillus delbrueckii
313 <400> SEQUENCE: 20
314 ataaatctcg agtgggtgatt cagcc 25
317 <210> SEQ ID NO: 21
318 <211> LENGTH: 25
319 <212> TYPE: DNA
320 <213> ORGANISM: Lactobacillus delbrueckii
322 <400> SEQUENCE: 21
323 atattactcg agacagaatg cagcc 25
326 <210> SEQ ID NO: 22
327 <211> LENGTH: 28
328 <212> TYPE: DNA
329 <213> ORGANISM: Lactobacillus delbrueckii
331 <400> SEQUENCE: 22
332 tgtttactaa aaatattttg gtaaagca 28
335 <210> SEQ ID NO: 23
336 <211> LENGTH: 28
337 <212> TYPE: DNA
338 <213> ORGANISM: Lactobacillus delbrueckii
340 <400> SEQUENCE: 23
341 tgtttactaa aagtattttg gtaaaaca 28
344 <210> SEQ ID NO: 24
345 <211> LENGTH: 28
346 <212> TYPE: DNA
347 <213> ORGANISM: Lactobacillus delbrueckii
349 <400> SEQUENCE: 24
350 tggcgactaa aagtattttg gtaaaaca 28
353 <210> SEQ ID NO: 25
354 <211> LENGTH: 28
355 <212> TYPE: DNA
356 <213> ORGANISM: Lactobacillus delbrueckii
358 <400> SEQUENCE: 25
359 aaattactaa aaatatttta gtaaaaca 28
362 <210> SEQ ID NO: 26
363 <211> LENGTH: 29
364 <212> TYPE: DNA
365 <213> ORGANISM: Lactobacillus delbrueckii
367 <400> SEQUENCE: 26
368 tcttgatttg tttagtaaac ggggtctata 29
371 <210> SEQ ID NO: 27
372 <211> LENGTH: 29
373 <212> TYPE: DNA
374 <213> ORGANISM: Lactobacillus delbrueckii
376 <400> SEQUENCE: 27

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VERIFICATION SUMMARY

DATE: 11/18/2004

PATENT APPLICATION: US/10/019,817D

TIME: 16:29:51

Input Set : N:\FATIMA\10019817.txt

Output Set: N:\CRF4\11182004\J019817D.raw

L:11 M:270 C: Current Application Number differs, Wrong Format

L:434 M:283 W: Missing Blank Line separator, <400> field identifier